



GP1652

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| TRANSMITTAL LETTER (General - Patent Pending) | Docket No. 112843-039 |
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In Re Application Of: Germond et al.

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|--------------------------|-----------------------------|---------------------|------------------------|
| Serial No. 10/019,817 | Filing Date May 13, 2002 | Examiner K. Kerr | Group Art Unit 1652 |
|--------------------------|-----------------------------|---------------------|------------------------|

Title: **THE LACTOSE OPERON OF LACTOBACILLUS DELBRUEKII AND ITS USE FOR CONTROLLING GENE TRANSCRIPTION AND/OR EXPRESSION IN BACTERIAL CELLS**

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Transmittal of Information Disclosure Statement (duplicate); Supplemental Information Disclosure Statement (3 pgs.); and PTO Form 1449 (2 pgs.); 20 references; check in the amount of \$180.00; and return receipt postcard.

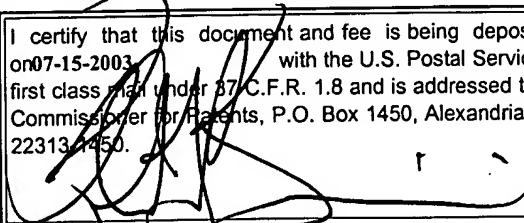
in the above identified application.

- ☒ No additional fee is required.
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Dated: July 15, 2003

Robert M. Barrett
Reg. No. 30,142
BELL, BOYD & LLOYD LLC
P.O. Box 1135
Chicago, IL 60690-1135
Phone: 312-807-4204

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.
112843-039

In Re Application Of: **Germona et al.**

Serial No.
10/019,817

Filing Date
May 13, 2002

Examiner
K. Kerr

Group Art Unit
1652

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37 CFR 1.97(b)

1. ☐ The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. ☒ The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

☐ the statement specified in 37 CFR 1.97(e);

OR

☒ the fee set forth in 37 CFR 1.17(p).

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.
112843-039

In Re Application: **Germond et al.**

Serial No
10/019,81

JUL 21 2003

Filing Date
May 13, 2002

Examiner
K. Kerr

Group Art Unit
1652

**THE LACTOSE OPERON OF LACTOBACILLUS DELBRUEKII AND ITS USE FOR
GENE TRANSCRIPTION AND/OR EXPRESSION IN BACTERIAL CELLS**

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

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as described below.

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Dated: July 15, 2003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Germond et al.

Appl. No.: 10/019,817

Conf. No.: 9937

Filed: May 13, 2002

Title: THE LACTOSE OPERON OF LACTOBACILLUS DELBRUEKII AND ITS
USE FOR CONTROLLING GENE TRANSCRIPTION AND/OR EXPRESSION
IN BACTERIAL CELLS

Art Unit: 1652

Examiner: K. Kerr

Docket No.: 112843-039

Commissioner for Patents

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 37 C.F.R. 1.97, and 37 C.F.R. 1.98, Applicants request that a citation and examination of the references cited below, and on the attached PTO-1449 form, copies of which are enclosed, be made during the course of examination of the above-identified application for United States patent.

OTHER DOCUMENTS

Chassy et al., *Molecular characterization of the plasmid-encoded lactose-PTS of Lactobacillus casei*, FEMS Microbiology Reviews, vol. 63 (1989) pp. 157-166.

Robert M. Horton, *PCR-Mediated Recombination and Mutagenesis*, Molecular Biotechnology, vol. 3 (1995) pp. 93-95.

Germond et al., *A new genetic element in Lactobacillus delbrueckii subsp. bulgaricus*, Mol. Gen. Genet., vol. 248 (1995) pp. 407-416.

Gasson et al., *Plasmid Complements of Streptococcus lactis NCDO 712 and Other Lactic Streptococci After Protoplast-Induced Curing*, Journal of Bacteriology, vol. 154, no. 1, April 1983, pp. 1-9.

Sanger et al., *DNA sequencing with chain-terminating inhibitors*, Proc. Natl. Acad. Sci. USA, vol. 74, no. 12, December 1977, pp. 5463-5467.

Platteuw et al., *Use of the Escherichia coli β -Glucuronidase (gusA) Gene as a Reporter Gene for Analyzing Promoters in Lactic Acid Bacteria*, Applied and Environmental Microbiology, vol. 60, no. 2, February 1994, pp. 587-593.

- Holo et al., *High-Frequency Transformation, by Electroporation, of Lactococcus lactis subsp. cremoris Grown with Glycine in Osmotically Stabilized Media*, Applied and Environmental Microbiology, vol. 55, no. 12, December 1989, pp. 3119-3123.
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- Weickert et al., *Site-directed mutagenesis of a catabolite repression operator sequence in Bacillus subtilis*, Proc. Natl. Acad. Sci. USA, vol. 87, August 1990, pp. 6238-6242.
- Schmidt et al., *Expression and Nucleotide Sequence of the Lactobacillus bulgaricus β -Galactosidase Gene Cloned in Escherichia coli*, Journal of Bacteriology, February 1989, pp. 625-635.
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- Poolman et al., *Lactose Transport System of Streptococcus thermophilus: a Hybrid Protein with Homology to the Melibiose Carrier and Enzyme III of Phosphoenolpyruvate-Dependent Phosphotransferase Systems*, Journal of Bacteriology, vol. 171, no. 1, January 1989, pp. 244-253.
- Oskouian et al., *Cloning and Characterization of the Repressor Gene of the Staphylococcus aureus Lactose Operon*, Journal of Bacteriology, vol. 169, no. 12, December 1987, pp. 5459-5465.
- van Rooijen et al., *Molecular Cloning, Transcriptional Analysis, and Nucleotide Sequence of lacR, a Gene Encoding the Repressor of the Lactose Phosphotransferase System of Lactococcus lactis*, The Journal of Biological Chemistry, vol. 265, no. 30, October 1990, pp. 18499-18503.
- Schroeder et al., *Analysis of the lacZ sequences from two Streptococcus thermophilus strains: comparison with the Escherichia coli and Lactobacillus bulgaricus β -galactosidase sequences*, Journal of General Microbiology, vol. 137 (1991) pp. 369-380.
- Terzaghi et al., *Improved Medium for Lactic Streptococci and Their Bacteriophages*, Applied Microbiology, June 1975, vol. 29, no. 6, pp. 807-813.
- Devereux et al., *A comprehensive set of sequence analysis programs for the VAX*, Nucleic Acids Research, (1984) vol. 12, no. 1, pp. 387-395.
- W. V. Shaw, *Chloramphenicol Acetyltransferase assay*, Methods Enzymol. vol. 43 (1975) pp. 737-755.
- Marion M. Bradford, *A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein utilizing the Principle of Protein-Dye Binding*, Anal. Biochem., vol. 12 (1976) pp. 248-254.

Appl. No. 10/019,817

DeMan et al., *A medium for the cultivation of lactobacilli*, J. Appl. Bacteriol., vol. 23 (1960) pp. 130-135.

Applicants look forward to early and favorable consideration of this matter.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY 

Robert M. Barrett

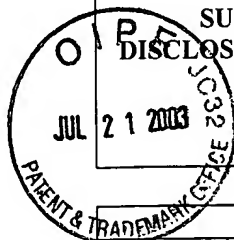
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Dated: July 15, 2003



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| SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) PTO Form 1449 | Atty Docket No. 112843-039 | Application No. 10/019,817 |
| | Applicant Germond et al. | |
| | Filing Date May 13, 2002 | Group 1652 |

| U.S. PATENT DOCUMENTS | | | | | | |
|------------------------|--------------------|---------------------|----------|-------|----------|----------------------------------|
| Examiner's Initials | Document Number | Publication Date | Inventor | Class | Subclass | Filing Date If Appropriate |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|--------------------|---------------------|---------|-------|----------|-------------|----|
| Examiner's Initials | Document Number | Publication Date | Country | Class | Subclass | Translation | |
| | | | | | | Yes | No |
| | | | | | | | |
| | | | | | | | |

| Examiner's Initials | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | |
|------------------------|--|--|
| | • | Chassy et al., <i>Molecular characterization of the plasmid-encoded lactose-PTS of Lactobacillus casei</i> , FEMS Microbiology Reviews, vol. 63 (1989) pp. 157-166. |
| | • | Robert M. Horton, <i>PCR-Mediated Recombination and Mutagenesis</i> , Molecular Biotechnology, vol. 3 (1995) pp. 93-95. |
| | • | Germond et al., <i>A new genetic element in Lactobacillus delbrueckii subsp. bulgaricus</i> , Mol. Gen. Genet., vol. 248 (1995) pp. 407-416. |
| | • | Gasson et al., <i>Plasmid Complements of Streptococcus lactis NCDO 712 and Other Lactic Streptococci After Protoplast-Induced Curing</i> , Journal of Bacteriology, vol. 154, no. 1, April 1983, pp. 1-9. |
| | • | Sanger et al., <i>DNA sequencing with chain-terminating inhibitors</i> , Proc. Natl. Acad. Sci. USA, vol. 74, no. 12, December 1977, pp. 5463-5467. |
| | • | Platteeuw et al., <i>Use of the Escherichia coli β-Glucuronidase (gusA) Gene as a Reporter Gene for Analyzing Promoters in Lactic Acid Bacteria</i> , Applied and Environmental Microbiology, vol. 60, no. 2, February 1994, pp. 587-593. |
| | • | Holo et al., <i>High-Frequency Transformation, by Electroporation, of Lactococcus lactis subsp. cremoris Grown with Clcine in Osmotically Stabilized Media</i> , Applied and Environmental Microbiology, vol. 55, no. 12, December 1989, pp. 3119-3123. |
| | • | Delley et al., <i>DNA Probe for Lactobacillus delbrueckii</i> , Applied and Environmental Microbiology, vol. 56, no. 6, June 1990, pp. 1967-1970. |
| | • | Weickert et al., <i>Site-directed mutagenesis of a catabolite repression operator sequence in Bacillus subtilis</i> , Proc. Natl. Acad. Sci. USA, vol. 87, August 1990, pp. 6238-6242. |

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| Examiner: | Date Considered: |
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**SUPPLEMENTAL INFORMATION
DISCLOSURE CITATION IN AN APPLICATION**
(Use several sheets if necessary)

PTO Form 1449

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| Atty Docket No. 112843-039 | Application No. 10/019,817 |
| Applicant Germond et al. | |
| Filing Date May 13, 2002 | Group 1652 |

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|------------------------|---|
| | Schmidt et al., <i>Expression and Nucleotide Sequence of the Lactobacillus bulgaricus β-Galactosidase Gene Cloned in Escherichia coli</i> , Journal of Bacteriology, February 1989, pp. 625-635. |
| | Leong-Morgenthaler et al., <i>Lactose Metabolism in Lactobacillus bulgaricus: Analysis of the Primary Structure and Expression of the Genes Involved</i> , Journal of Bacteriology, vol. 173, no. 6, March 1991, pp. 1951-1957. |
| | Poolman et al., <i>Lactose Transport System of Streptococcus thermophilus: a Hybrid Protein with Homology to the Melibiose Carrier and Enzyme III of Phosphoenolpyruvate-Dependent Phosphotransferase Systems</i> , Journal of Bacteriology, vol. 171, no. 1, January 1989, pp. 244-253. |
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| | DeMan et al., <i>A medium for the cultivation of lactobacilli</i> , J. Appl. Bacteriol., vol. 23 (1960) pp. 130-135. |

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